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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,344

04/12/2004

Michael Isner

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26643 7590 02/07/2007  
PETER J. GORDON, PATENT COUNSEL  
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EXAMINER

SAJOUS, WESNER

ART UNIT

PAPER NUMBER

2628

MAIL DATE

DELIVERY MODE

02/07/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

*Seeger*  
**Notice of Allowability**

Application No.

10/822,344

Examiner

Sajous Wesner

Applicant(s)

ISNER, MICHAEL

Art Unit

2628

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment and response dated 9/5/06.

2. ☒ The allowed claim(s) is/are 1-9.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some\* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.

(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 9/5/06 & 9/18/06

4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.

7. ☐ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other \_\_\_\_\_.

## **DETAILED ACTION**

### **Remark**

1. This communication is responsive to the Request for Continued Examination (RCE) filed on 9/05/2006. Claims 1-9 are presented for examination.

### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on 9/5/06 has been entered.

### ***Allowable Subject Matter***

3. Claims 1-9, after further consideration and search, are allowed over the prior art.

### **Reasons for Allowance**

4. The following is an examiner's statement of reasons for allowance:  
Articles assigned to: Ken Shoemaker entitled "Animating Rotation with Quaternion Curves"; Myoung-Jun Kim et al. entitled "A C2-continuous B-spline Quaternion Curve Interpolating a given sequence of solid orientations"; John Hart et al. entitled

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"Visualizing Quaternion Rotation" disclose the use of quaternion interpolation to control the rotation (roll) and movements along a 2D curve (path) so as to generate an animated feature. However, the distinction between the above articles and the present claims is that they fail to disclose positioning multiple three dimensional structures along a path in a 3D model and determining a direction and an amount of roll around the direction for each intermediate position along the path using quaternion interpolation between the roll of a first pose and the roll of a second pose, wherein each three dimensional structures is associated with a different intermediate position along the path and a direction at its intermediate position (as recited in claims 1, 4 and 7).

Kroitor (US 6577315) teaches controlling a three-dimensional (3D) object to generate a plurality of interconnected elements poses derived from source poses and positioning the poses along the path of the 3D space (as defined by figs. 4-7. See col. 2, line 44 to col. 3, line 66). However, Kroitor fails to teach the above underlined features of the claimed invention in the manner recited in the claims. Accordingly, the limitations of claims 1-9 are allowed over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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**Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sajous Wesner whose telephone number is 571-272-7791. The examiner can normally be reached on Mondays thru Fridays between 10:30 and 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WS

2/2/06

  
**WESNER SAJOUS  
PRIMARY EXAMINER**